

The patent application teaches that the number of C alleles determines the phenotype and that the greater REA increase is observed in C/C animals.

Thus, the specification discloses that there is a linear effect, i.e., animals with the C/C and C/T genotype have the phenotype of increased rib-eye area, as compared to those with the T/T genotype, and that animals with the C/C genotype had the greater increased rib-eye area. This is what is meant by “co-dominant inheritance”- i.e., C/C have the largest rib eye area, C/T an intermediate rib-eye area and the T/T the smallest rib-eye area.

35 USC § 102

The Examiner rejected claims 11, 20 and 21 as being anticipated by Byatt et al. The Examiner asserts that SEQ ID NO. 3018 in Byatt et al. discloses the C allele at position 150 of SEQ ID NO : 1 and thus that Byatt et al. discloses a method of genotyping animals to determine if they have a C allele at this position.

Byatt et al. does not disclose the T allele at position 150 of SEQ ID NO : 1, but rather teaches only the wild-type sequence. Before the disclosure in the instant patent application, it was not known that there was a polymorphism at this position, that there was the possibility of a T residue at this position, or that any phenotype was associated with a polymorphism at this position. Because it discloses only the wild-type sequence, Byatt et al. does not teach the method of genotyping claimed, i.e., determining whether an animal has the C or a T allele at this position. It does not teach genotyping animals to determine which allele is at this position because no variation in this allele was known. This knowledge derives from the instant application.

Further, Byatt et al. does not teach all elements of claim 11. Claim 11 requires the element of “sorting the animals into groups of like genotype”. Since Byatt et al. does not teach that the T allele exists, this reference does not teach the step of sorting, as only one genotype is possible based on the teachings of Byatt et al.

Nor does Byatt et al. teach all elements of claim 20. Claim 20 requires the step of “determining whether the animal has C residue (a C allele) or T residue (a T allele)”,

and it also requires "assigning either the C/C, C/T or T/T genotype, at position 150 of SEQ ID NO : 1". Since Byatt et al. does not teach that the T allele exists, it does not teach the step of determining whether the animal has a C residue or T residue, nor does it teach the step of assigning either the C/C, C/T or T/T genotype to the animal.

To further clarify the nature of the invention claimed, the Applicant has amended claim 20 to add the element: "wherein the C/C or C/T genotype is associated with increased rib-eye area as compared to the T/T genotype".

The Applicant requests withdrawal of this rejection in respect of claims 11, 20 and 21.

In view of the foregoing, the Applicant submits that the Application is in condition for allowance, and requests that the Examiner withdraw the rejections against claims 1 to 9, 11, 20, 21.

Respectfully submitted,
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